Construction Project Briefing

September 9, 2009

CHICAGO TRANSIT AUTHORITY

Today's Presentation

- Cermak Station Project
- Brown Line Capacity Expansion Project
- Subway Escalators Project
- Dearborn Subway Tie Replacement Project
- Systemwide Communications Upgrade Project
- Security Camera Project
- Howard Signals Project
- Loop Signals Project
- Blue Line Signals Project

Project Title: Cermak Station Project
Managing Department: Facilities Construction

Justification of Need:	Reconstruct station entrance after vehicle accident and fatality; make station ADA compliant
Priority of Project:	High
Project Budget	$12.5M
Earned to Date:	$0
Percent Change Orders to Construction Contract:	0%
Percent Time Used to Date:	0%
Funding Source:	ARRA (Federal Stimulus Funds)
Procurement Status:	Project in design; scheduled for zoning concurrence in September and permit approval in October.
Estimated Start Date/Estimated Length of Project:	October 2009 – 15 month construction duration
Project Manager:	Steven Mascheri (GM); Chris Mulcrone (PM)

Detailed Overview of Scope:

- New auxiliary entrance at Archer Avenue
- New station house with new revenue equipment, elevator, escalator, and bike racks at Cermak entrance
- Attain ADA compliance upon project completion

Project Title: Cermak Station Project
Managing Department: Facilities Construction

Impact on Customers:	Cermak entrance will be closed during construction. CTA will construct new Archer entrance to keep station open.
Benefit to System:	• Station will become ADA-compliant • Third means of egress from platform for station access & exiting
Benefit to Community:	• Station will become ADA-compliant • New Archer Avenue auxiliary entrance
Impact on Accessibility:	Station will become ADA-compliant
Estimated # of Jobs Created:	125
Customer Communication Need:	Cermak entrance to be closed during construction and will reroute customers to Archer auxiliary entrance

Comparable Projects:

- Brown Line Capacity Expansion Project

Project Title: Brown Line Capacity Expansion Project
Managing Department: Facilities Construction

Justification of Need:	Accommodate increased ridership, provide accessibility, upgrade support systems
Total Project Budget:	$529.9M
Earned to Date:	$479.2M or 90.4%
Percent Change Orders to Construction Contract:	7.96% (includes all 7 contracts)
Percent Time Used to Date:	90%
Funding Source:	FFGA
Estimated Start Date/Estimated Length of Project	NTP 12/2004; Completion Date 12/31/2009
Project Manager:	Bob Wittmann (GM); Pedro Hurtado and John Titzer (PM)

Detailed Overview of Scope:

- Extend platforms to allow for 8-car operations
- Make stations ADA accessible
- Rehab 18 stations; add elevators to 13 stations
- Restore 8 historic stations in agreement with the Illinois Historic Preservation Agency
- Upgrade signal, power and communications delivery system

Project Title: Brown Line Capacity Expansion Project
Managing Department: Facilities Construction

Construction Progress

Phase	Description	Status
Construction	Fullerton ▪ Installation of the elevators, escalators, communications conduit, electrical work in support rooms, station lighting, concession electrical, and wall panel system continues. Work on the historic stationhouse electrical, and stair system work is ongoing. Installation of stationhouse flooring, painting of structural steel and NB canopy extensions is ongoing. Reconstruction of Fullerton Ave. began the last week of August.	To be complete December 2009
	Belmont ▪ Installation of elevators and escalators, electrical work in support rooms, wall panel systems continues. Work in the historic stationhouse is ongoing. Installation of NB canopy extensions is ongoing. Reconstruction of Belmont Ave. began the last week in August. Re-routing of customers through the new station entrance and elimination of the temp station occurred on August 29, 2009.	To be complete December 2009

Delay Explanation:
• No current delays.

Project Title: Subway Escalators
Managing Department: Facilities Construction

Justification of Need:	Escalators beyond useful life; high maintenance cost
Total Project Budget:	$22.8M
Construction Contract Value:	$16.7M
Earned to Date:	$12.1M or 73%
Percent Change Orders to Construction Contract:	3.98%
Percent Time Used to Date:	60%
Funding Source:	FTA
Estimated Start Date/Estimated Length of Project	NTP 1/7/08; Completion Date 9/22/10
Project Manager:	Bob Wittmann (GM); Rick Herndobler (PM)

Detailed Overview of Scope:

- Replace nine escalators, reopen one exit and relocate one escalator facility on Red and Blue Lines Subway

Project Title: Subway Escalators
Managing Department: Facilities Construction

Construction Progress

Phase	Description	Status
Completed	Jackson/Van Buren Red (street to mezzanine escalator)	Returned to service 2/19/09
	Monroe/Adams Red (platform to mezzanine escalator)	Returned to service 3/19/09
	Adams/Jackson Red (street to mezzanine escalator)	Returned to service 4/18/09
	Randolph/Washington Blue (platform to mezzanine escalator)	Returned to service 5/4/09
Construction	Monroe/Adams Red (street to mezzanine escalator)	Return to service November 2009
	Adams/Jackson Red (street to mezzanine escalator)	Return to service September 2009
	Harrison Red (platform to mezzanine escalator)	Return to service September 2009
Remaining	Madison/Monroe Blue (platform to mezzanine)	Construction to begin September 2009
	Monroe/Adams Red (street to mezzanine)	TBD

Delay Explanation:

- Monroe/Adams street to mezzanine escalator existing upper pit too small, modifications designed and built resulting in a return to service delay. No effect on Contract Substantial Completion.

Project Title: Dearborn Subway Tie Replacement Project
Managing Department: Power & Way Construction

Justification of Need:	Growing number of slow zones in Dearborn Subway
Priority of Project:	Critical
Total Project Budget:	$87.8M
Construction Contract Value:	$58M
Earned to Date:	$19.4M
Percent Change Orders to Construction Contract:	2.5%
Percent Time Used to Date:	33%
Funding Source:	ARRA
Procurement Status:	Completed
Estimated Start Date/Estimated Length of Project:	NTP 3/27/09; Total project length = 345 days from NTP (March 7, 2010).
Project Manager:	Carole Morey (GM); David Heard (PM)

Detailed Overview of Scope:

- Work includes replacement of all wooden half-ties and ballasted track with direct fixation track systems, replacement of portions of running rail and all contact rail and contact rail chairs, special track work in LaSalle Crossover, negative return and signal work, concrete repair in deteriorated sections of tunnel and foot walk, and grouting and sewer cleaning.

Project Title: Dearborn Subway Tie Replacement Project
Managing Department: Power & Way Construction

Impact on Customers:	One construction season (2009-2010); 8 Single Tracks, 15 Line Cuts
Benefit to System:	Slow zones in Dearborn Subway will be eliminated; can safely run trains at higher speeds.
Benefit to Community:	Faster commute time through the Dearborn subway once construction is complete.
Impact on Accessibility:	N/A
Estimated # of Jobs Created:	400
Customer Communication Need:	Project website, signage, additional Customer Assistants at Blue Line Stations

Comparable Projects:

- Block 37 Half Tie Project (Red and Blue Lines)
- State Street Subway Tie Project

Project Title: Dearborn Subway Tie Replacement Project
Managing Department: Power & Way Construction

Construction Progress

Phase	Description	Status
Milestone A	▪ Tie demolition, rail replacement and placement of temporary plates between the North Portal and Grand Crossover	Ongoing (End 8/24/09)
Milestone B	▪ Half-tie replacement and replacement of rail from 1000 feet south of Grand crossover to south end of platform at Clark/Lake.	Ongoing (To be completed 10/23/09)
Milestone C	▪ Half-tie replacement and replacement of running rail from south end of platform at Clark/Lake to east of river. ▪ Removal of ballast, pour of new invert and half-ties and replacement of running rail from east of river to south portal. ▪ Special track work at LaSalle crossover.	Not Started (To be completed 12/7/09)

Delay Explanation:
• No current delays.

Project Title: Systemwide Communications Upgrade
Managing Department: Power & Way Construction

Justification of Need:	Upgrade communication infrastructure to address technological changes.
Priority of Project:	High
Construction Contract Value:	$44.5M
Earned to Date:	$36.1M
Percent Change Orders to Construction Contract:	43%
Percent Time Used to Date:	92%
Funding Source:	IDOT, RTA, Bond funds
Procurement Status:	N/A
Estimated Start Date/Estimated Length of Project:	NTP given 9/1/05; contract extended to 12/31/09
Project Manager:	Carole Morey (GM); Herb Nitz (PM)

Detailed Overview of Scope:

- Upgrade of new fiber optic and copper backbone
- Installation of over 40 miles of new fiber and over 60 miles of new copper (w/Brown Line)
- Installation of over 120 new high-speed fiber optic nodes

Project Title: Systemwide Communications Upgrade
Managing Department: Power & Way Construction

Impact on Customers:	N/A
Benefit to System:	Improve system-wide communication capabilities, reduce operating costs and support future technology enhancements that can improve safety, security and efficiency.
Benefit to Community:	N/A
Impact on Accessibility:	N/A
Estimated # of Jobs Created:	N/A
Customer Communication Need:	N/A

Comparable Projects:

- Blue Line Signals project

Project Title: Systemwide Communications Upgrade
Managing Department: Power & Way Construction

Construction Progress

Phase	Description	Status
Construction	▪ Brown Line Communications package ▪ Digital Advertising/ VMS signs (Brown Line)	Ongoing, complete by 12/31/09 Began 8/5/09 at Francisco, Rockwell, Kedzie
Testing/ Cutovers/ Punchlist	▪ Systemwide (also includes demolition of old equipment)	Complete by 12/31/09

Delay Explanation:
• Proceed Order (6/1/09) extended contract for an additional 7 months at no cost to CTA.

Project Title: Security Camera Initiative
Managing Department: Power & Way Construction

Justification of Need:	Increase security at stations and rail yards.
Priority of Project:	High/Critical
Total Project Budget (Phases 1 and 2 only):	$17.9M
Construction Contract Value:	JOC Work Order #1 = $1.2M
Earned to Date:	N/A
Percent Change Orders to Construction Contract:	N/A
Percent Time Used to Date:	Phase 1 = 26%
Funding Source:	DHS, RTA (AFC portion)
Procurement Status:	In process
Estimated Start Date/Estimated Length of Project:	NTP given 7/21/09 for first six Green Line Stations (Complete in 10 months)
Project Manager:	Carole Morey (GM); Herb Nitz (PM)

Detailed Overview of Scope:

- Phase 1: Security cameras at 17 Green Line stations (complete by 12/31/09)
- Phase 2: Security cameras at 12 Red Line stations (complete by 5/31/10) and face capture cameras at all stations (complete by 5/31/10).
- Phase 3: Full security camera coverage at all remaining stations (funding dependent)

Project Title: Security Camera Initiative
Managing Department: Power & Way Construction

Impact on Customers:	N/A
Benefit to System:	Improved security
Benefit to Community:	Improved security
Impact on Accessibility:	N/A
Estimated # of Jobs Created:	N/A
Customer Communication Need:	N/A

Comparable Projects:

- Subway camera project
- Dan Ryan Camera change order

Project Title: Security Camera Initiative
Managing Department: Power & Way Construction

Construction Progress

Phase	Description	Status
Construction	▪ Green Line – Lake Branch (Central, Laramie, Cicero, Pulaski, Conservatory/Central Park, California)	NTP for first six stations given 7/21/09
Design/ Procurement	▪ Securing phase 2 design services via a task order under the Mechanical Engineering contract. ▪ JOC contractor preparing estimate for second work order covering the balance of the Phase 1 Green Line stations	Ongoing Due 8/31/09

Delay Explanation:
• No current delays.

Project Title: Howard Signals Project
Managing Department: Power & Way Construction

Justification of Need:	Restore Reliability and Improve Performance of the Train Control System
Priority of Project:	High
Total Project Budget:	$7M
Construction Contract Value:	$5,514,404.00 (Signal); $354,885.41 (JOC)
Earned to Date:	$0
Percent Change Orders to Construction Contract:	0%
Percent Time Used to Date:	0%
Funding Source:	CTA Bonds
Procurement Status:	NTP was issued August 6, 2009
Estimated Start Date/Estimated Length of Project:	August 6, 2009, 720 Days
Project Manager:	Barney Gray (GM); Grace Ohs (PM)

Detailed Overview of Scope:

- Upgrade existing Vital Processor Interlocking (VPI) systems at Interlockings near the Howard Street Station. Upgrades to Communication hardware and software. Also includes replacement of faceplates for Howard Control Panel, new CTC Workstation, and new Maintainer's overview displays.
- Project also includes supplemental JOC work at Howard Tower. Roof replacement, HVAC replacement, and new fire suppression system is included.

Project Title: Howard Signals Project
Managing Department: Power & Way Construction

Impact on Customers:	During non-rush periods, reduced train speeds when workers are on the ROW.
Benefit to System:	Improve signal system at Howard Interlocking to prevent delays to service.
Benefit to Community:	More consistent travel times due to increased reliability.
Impact on Accessibility:	N/A
Estimated # of Jobs Created:	N/A
Customer Communication Need:	• Courtesy notification to the Alderman and Community about the project. • Train announcements about reduced speeds due to workers on ROW.

Comparable Projects:

- Blue Line Signals Project
- Loop Signals Project

Project Title: Howard Signals Project
Managing Department: Power & Way Construction

Construction Progress

Phase	Description	Status
Bid	▪ Board Approval of Sole Source Contract for Alstom Signaling Inc.	Approved 6/10/09
Construction	▪ NTP	Issued 8/06/09
JOC Construction	▪ Wight-Hill started work 6/10/09, HVAC and Roof Work is substantially complete, Fire Suppression System needs to be retested due to issues with the seal of the room.	Ongoing

Delay Explanation:

- Project was originally presented as a potential change to Howard Street Station but due later revised to a Sole Source Contract.
- NTP for Alstom was delayed due to insurance issues that were resolved on 7/16/09. NTP was issued 8/06/09.
- Planned Completion Date of JOC work at Howard Tower has been extended from 7/29/09 to 8/14/09 due to coordination issues with roof structure and new HVAC equipment.
- Retesting of the Fire Suppression system is scheduled for 8/28/09 due to issues with the seal of the room. Contractor is addressing these issues.

Project Title: Loop Signals Project
Managing Department: Power & Way Construction

Justification of Need:	Upgrade Towers and Interlocking Control Systems to current technology; Tower 18 past useful life
Total Project Budget:	$103.2M
Construction Contract Value:	$67.7M
Earned to Date:	$43.1M or 63.7%
Percent Change Orders to Construction Contract:	40.0%
Percent Time Used to Date:	100%
Funding Source:	FTA, RTA and Bond Funds
Estimated Start Date/Estimated Length of Project	NTP 2/21/07; Original Completion Date 9/2009; Revised Completion Date 9/2010
Project Manager:	Barney Gray (GM); Brittany Dyra (PM)

Detailed Overview of Scope:

- New Bi-directional Cab Signal System for the Loop
- Construction of new Control Tower at Lake/Wells
  - New control panel with remote controls for Tower 12 and Jefferson
- Installation of a new Signal Facility Building at Randolph/Wells
- Installation of a new Tower 12 Relay House
- Installation of new Interlocking at Jefferson

Project Title: Loop Signals Project
Managing Department: Power & Way Construction

Construction Progress

Phase	Description	Original Completion Date	Revised Completion Date	Actual Completion Date
Milestone 1	Approved Signal Block Design	8/20/07	4/2008	3/18/08
Milestone 2	Approved Cable Plan	9/4/07	5/2008	5/21/08
Milestone 3	Approved Tower 18 Circuit Design	9/19/07	6/2008	12/2/08
Milestone 4	Audio Circuit Cutover	9/2008	N/A	9/14/08
Milestone 5	Tower 18 Relay Room	3/20/09	10/2009	TBD
Milestone 6	Tower 18 (Can't start until Milestone 5 is complete)	None Provided	3/2010	
Milestone 7	Tower 18 Interlocking	8/2009	3/2010	
Milestone 8	Tower 12 Interlocking	8/2009	7/2010	
Milestone 9	Substantial Completion	9/2009	9/2010	

Delay Explanation:

- Original project schedule to be complete 9/2009; current project schedule shows completion for 9/2010. See dates above for details.

Project Title: Blue Line Signals Project
Managing Department: Power & Way Construction

Justification of Need:	Signal system is beyond expected service life and upgrades needed for compatibility with new AC-powered railcars. Traction Power upgrades needed to reduce power shutdowns and service disruptions.
Total Project Budget:	$243M
Construction Contract Value:	$183.3M
Earned to Date:	$166.6M or 91%
Percent Change Orders to Construction Contract:	6.2%
Percent Time Used to Date:	100% of original time, 94% with new date of 11/22/09
Funding Source:	CTA Bonds, RTA, FTA, IDOT
Estimated Start Date/Estimated Length of Project	NTP 12/1/05; Original Scope Completion Date 7/1/09, Substantial Completion Date for Additional Work 11/22/09
Project Manager:	Barney Gray (GM); Grace Ohs (PM)

Detailed Overview of Scope:

- Blue Line Signal and Traction Power Upgrades.
- Replace and upgrade signals, power distribution, and associated components at various facilities in the Dearborn Subway, and on the Congress and Kennedy Branches of the Blue Line and State Street Subway. Upgrades to communication facilities.

Project Title: Blue Line Signals Project
Managing Department: Power & Way Construction

Construction Progress

Phase	Description	Status
Punch list	▪ Partial substantial completion from Forest Park to Jefferson Park for signal work. Punch list work has started.	Ongoing
Construction	▪ Additional work: Automatic Vehicle Identification Upgrades, Worker Ahead Zone Modifications, Track Markers, and Lake Street Cable Rerouting for Blocked Duct Bank.	Ongoing

Delay Explanation:
• Contract Completion date extended from July 1, 2009 to November 22, 2009 for the completion of additional work.